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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,933	09/09/2003	Sunny E.L. Huang	7342	1592
7590	07/29/2004		EXAMINER	
Paul M. Denk Ste. 170 763 S. New Ballas Road St. Louis, MO 63141				REIS, TRAVIS M
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/657,933	HUANG, SUNNY E.L.	
	Examiner Travis M Reis	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-19 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 15 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of: _____
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 20030925.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the bayonet lock must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Campbell

(U.S. Patent 4197807).

Campbell discloses a resiliently expandable cautionary structure in the shape of a cone and method of using comprising a structure (10), having an inherent spiral configuration formed of a band of resilient material (3); a base member (1) having a span greater than the largest diameter of said structure and a generally centered cylindrical fitting (5) with external threading and joining said structure at one or more points; a button (6,7) having a span of the narrowest diameter of said structure, able to be rotated about the vertical axis of said structure via internal threading, and located opposite said base member; a reflective surface (Abstract) broadly considered to be illuminating means as also stated by applicant in the disclosure, e.g. claim 19, regularly arrayed along the length of said band (Figures 1-3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 10, & 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard (U.S. Patent 4256050) in view of Ybanez (U.S. Patent 2275711).

With reference to claims 1, 2, 10, & 19, Barnard discloses a resiliently expandable cautionary structure in the shape of a cone and method of using comprising a structure (4), having an inherent spiral configuration formed of a band of resilient polymer material (Abstract); a base member (1) having a span greater than the largest diameter of said structure and joining said structure at one or more points; a cross brace (11) having a span of the narrowest diameter of said structure, joining said structure at two points, and located opposite said base member; a fastening means (4A) having one end broadly considered to

be contacting said cross brace; an illuminating means, broadly considered to be retroreflective film (10), regularly arrayed along the length of said band (Figures 1-3).

Barnard does not disclose a fastening means comprising a metal strap with a free end.

Ybanez discloses a safety signal with a strap (29) having one end (31) free (Figures 1 & 2). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the strap disclosed by Ybanez to the structure disclosed by Barnard in order to more directly secure the structure in collapsed configuration and prevent accidental expansion.

With reference to claim 3, the shape of the coils in Figure 1 disclosed by Barnard & Figure 1 disclosed by Ybanez, are in a broad sense, cylinders, in that they form tubular regions bounded by parallel circular areas. Thus, as best understood, the shapes disclosed by Barnard & Ybanez is also considered to be "cylindrical" shapes.

6. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard & Ybanez as applied to claims 1-3, 10, & 19 above, and further in view of Headley (U.S. Patent 6164304).

Barnard & Ybanez disclose all of the instant claimed invention as stated above in the rejection of claims 1-3, 10, & 19 including said strap be metal (col. 2 line 36) (Figure 2).

Barnard & Ybanez do not disclose a strap of sufficient length to span at least twice the diameter of said structure with cooperating hook and pile fasteners with one segment of said hook and pile fasteners located at the fixed end of said strap and a second segment of said hook and pile located at the free end of said strap, whereby said strap extends from said cross brace, wraps the diameter of said structure when contracted, returns to said cross brace, and said second segment secures to said first segment.

Headley discloses an umbrella (10) with a strap (28) of sufficient length to span at

least twice the diameter of said structure when collapsed (Figure 3) with cooperating hook and pile fasteners (60a, 60b) with one segment of said hook and pile fasteners located at the fixed end of said strap and a second segment of said hook and pile located at the free end of said strap, whereby said strap extends from an end segment (26), wraps the diameter of said structure when contracted, returns to said end segment, and said second segment secures to said first segment (Figure 3). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the strap disclosed by Barnard & Ybanez with the strap disposed on the end segment disclosed by Headley (made of metal as taught by Barnard & Ybanez), said strap having the hook and pile fasteners disclosed by Headley in order to better secure the collapsed structure closed.

7. Claims 7 & 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard & Ybanez as applied to claims 1-3, 10, & 19 in view of Rahman (Des. 421810) & Shu (U.S. Patent 6109764).

Barnard & Ybanez disclose all of the instant claimed invention as stated above in the rejection of claims 1-3, 10, & 19 but do not disclose said illuminating means are light emitting diodes wired along the structure, said light emitting diodes include wiring to connect said structure to an external energy source.

Rahman discloses a flat to spiral light set with light wired along the spiral and capable of being plugged into an external energy source (Figure 1). The type of lights is not disclosed.

Shu discloses LED lamps for decorative lamp strings (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the LED lamp string disclosed by Shu in the manner taught by Rahman to the structure disclosed by Barnard & Ybanez in order that the structure would be more visually noticeable.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard, Ybanez, Rahman, & Shu, as applied to claims 7 & 9 above, and further in view of Shoemaker (U.S. Patent 3132624).

Barnard, Ybanez, Rahman, & Shu disclose all of the instant claimed invention as stated above in the rejection of claims 7 & 9, but do not disclose a battery pack located upon the base member proximate to the center of said base member provides energy for said illuminating means.

Shoemaker discloses a collapsible signal device with a battery pack (45) powering a light for illuminating the device (30) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the battery pack disclosed by Shoemaker to the structure disclosed by Barnard, Ybanez, Rahman, & Shu in case no external energy source available.

9. Claims 14 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Say (U.S. Patent 5335622).

With reference to claim 14, Campbell discloses all of the instant claimed invention as stated above in the rejection of claims 11-13 but do not disclose said fitting has internal threading that cooperates with external threading of said button.

Say discloses an indicator cap embodiment (24) in Figures 3 & 4, external thread/lugs (70) threadably engage the internal thread/lugs (73) in order to sealingly engage the cap to the housing (230) (col. 7 lines 16-25) (Figures 3 & 4). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the threadings on the fitting and the button disclosed by Campbell with the external thread/lugs and internal thread/lugs disclosed by Say since these are alternate forms of threading and to sealing engage the button to the fitting.

With reference to claim 15, Campbell discloses all of the instant claimed invention as stated above in the rejection of claims 11-13 but do not disclose said fitting and said button cooperate as a bayonet lock.

Say discloses an indicator cap embodiment (24) in Figure 12A, which uses a bayonet lock (218) to connect said cap to a structure (Figure 12A). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to replace the threadings on the fitting and the button disclosed by Campbell with the bayonet lock disclosed by Say in order to more rapidly secure the structure in collapsed configuration.

10. Claims 16 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Rahman & Shu.

Campbell discloses all of the instant claimed invention as stated above in the rejection of claims 11-13 but do not disclose said illuminating means are light emitting diodes wired along the structure, said light emitting diodes include wiring to connect said structure to an external energy source.

Rahman discloses a flat to spiral light set with light wired along the spiral and capable of being plugged into an internal source (Figure 1). The type of lights is not disclosed.

Shu discloses LED lamps for decorative lamp strings (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the LED lamp string disclosed by Shu in the manner taught by Rahman to the structure disclosed by Campbell in order that the structure would be more visually noticeable.

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell, Rahman, & Shu, as applied to claims 16 & 18 above, and further in view of Shoemaker.

Campbell, Rahman & Shu disclose all of the instant claimed invention as stated above in the rejection of claims 16 & 18, but do not disclose a battery pack located upon the base

member proximate to the center of the base member providing energy for the illuminating means.

Shoemaker discloses a collapsible signal device with a battery pack (45) powering a light for illuminating the device (30) (Figure 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the battery pack disclosed by Shoemaker to the structure disclosed by Barnard, Ybanez, Rahman, & Shu in case no external energy source available.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Weig discloses a spring actuated expandable traffic diverting device (U.S. Patent 2762328). Cioffi et al. discloses a traffic cone marker assembly (U.S. Patent 2954005). Rimkus discloses a portable collapsible traffic marker (U.S. Patent 3496904). St. Cyr discloses a road Buoy (U.S. Patent 4006702). Kwok discloses a mobile traffic warning sign (U.S. Patent 5488792). Rokosny discloses a collapsible marker cone (U.S. Patent 5566638). Braverman discloses a traffic marker and base unit (U.S. Patent 5613798). Ho discloses a telescopic roadblock (U.S. Patent 6338311).

13. Inquiries concerning this, or earlier, communications from the examiner should be directed to Travis M Reis (571) 272-2249; 8-5 M--F. If unreachable, contact the examiner's supervisor, Diego Gutierrez (571) 272-2245. The fax for the organization where this application or proceeding is assigned is (703) 872-9306 for all communications.



Travis M Reis
Examiner
Art Unit 2859

tmr
July 26, 2004

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